

Amendments to the Specification

Please insert the following three new paragraphs after the last paragraph on page 5:

In an embodiment, a method for determining a reserve price for a market, the method comprising the steps of: selecting characteristics of the market; selecting a relevant bidding model; estimating a structure of the market; predicting a bidding behavior; predicting a first outcome of the market; and evaluating the first outcome of the market. In an embodiment, the selecting characteristics step further comprises the steps of: receiving a first user input, wherein the first user input comprises information identifying an item to be auctioned; accessing a database; retrieving from the database historical bids data; retrieving from the database auction characteristics data, wherein the auction characteristics comprise information relating to historical auctions of similar items; outputting the bids data; and outputting the auction characteristics data. In an embodiment, the selecting a relevant bidding model step further comprises the steps of: receiving the auction characteristics data; accessing a database; retrieving from the database a relevant bidding model, wherein the bidding model is selected based on a corresponding relevance of the auction characteristics data; and outputting the relevant bidding model. In an embodiment, the estimating step further comprises the steps of: receiving the relevant bidding model; receiving bids data; expressing unobservable variables in terms of observable bids, wherein the unobservable variables are expressed in terms of observable bids by inverting the bid model; transforming the bids data to a sample of inverted bids, wherein the bids data are transformed by inverting the bid model; estimating an estimated latent structure of the market, wherein the sample of inverted bids receives application of statistical density estimation techniques to obtain the estimated structure; and outputting the estimated structure. In an embodiment, the bidding model has embedded an unknown structure, and wherein the predicting a bidding behavior step further comprises the steps of: receiving the estimated structure; receiving the relevant bidding model; substituting the estimated structure for the unknown structure; and outputting a prediction of bidding behavior. In an embodiment, the predicting a first outcome step further comprises the steps of: receiving a second user input, wherein the second user input comprises: an evaluation criterion, a candidate reserve price,

and a constraint; receiving the estimated structure; receiving the bidding behavior prediction for the candidate reserve price, wherein the bidding behavior prediction further comprises a prediction under the constraint; obtaining a value of the evaluation criterion, wherein the value is based on the estimated structure, the bidding behavior prediction, the candidate reserve price, and the constraint, the value comprising the first predicted outcome; and outputting the value. In an embodiment, the evaluating the first outcome step further comprises the steps of: receiving a third user input, wherein the third user input comprises a plurality of candidate reserve prices; receiving a predicted outcome for each the candidate reserve price; calculating descriptive statistics for each the candidate reserve price, wherein the descriptive statistics comprise a mean and a variance; ranking each the candidate reserve price with respect to the calculated mean and generating corresponding rankings for the plurality; and outputting the descriptive statistics and the rankings. In an embodiment, the evaluating the first outcome step further comprises the steps of: selecting a best reserve price, wherein the best reserve price comprises the candidate reserve price within the plurality having the highest the ranking; and outputting the best reserve price.

In an embodiment, a computer system comprising: a bus; a memory interconnected with the bus; and a processor interconnected with the bus, wherein the processor executes a method for determining a reserve price for a market, the method comprising the steps of: selecting characteristics of the market; selecting a relevant bidding model; estimating a structure of the market; predicting a bidding behavior; predicting a first outcome of the market; and evaluating the first outcome of the market.

In an embodiment, a computer readable medium for causing a computer system to execute the steps in a method for determining a reserve price for a market, the method comprising the steps of: selecting characteristics of the market; selecting a relevant bidding model; estimating a structure of the market; predicting a bidding behavior; predicting a first outcome of the market; and evaluating the first outcome of the market.